

## EAST Search History

| Ref # | Hits  | Search Query  | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|-------|---|---|------------------|---------|------------------|
| L1    | 16    | tsushima-masahiro.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/29 07:38 |
| L2    | 245   | 455/77.ccls. and (@ad<"20050329"<br>@rlad<"20050329")               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/29 07:41 |
| L4    | 1     | 2 and ("reception quality") and<br>(locat\$4 or position\$4 or GPS) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/29 07:42 |
| L5    | 0     | 2 and ("reception quality") and GPS                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/29 07:42 |
| L6    | 47855 | pioneer.as.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/29 07:43 |
| L7    | 2     | 6 and ("reception quality") and GPS                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/29 07:43 |
| S4    | 16    | tsushima-masahiro.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/25 21:25 |
| S5    | 241   | 455/77.ccls. and (@ad<"20040331"<br>@rlad<"20040331")               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2008/02/25 21:32 |

## EAST Search History

|     |    |   |   |    |    |                  |
|-----|----|---|---|----|----|------------------|
| S6  | 0  | S5 and tun\$4 and ("reception quality") and GPS             | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/25 21:33 |
| S7  | 85 | tun\$4 and ("reception quality") and GPS                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/25 21:33 |
| S8  | 57 | S7 and (@ad<"20040331"<br>@rlad<"20040331")                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/25 21:33 |
| S9  | 2  | "20060135098"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/26 13:09 |
| S10 | 7  | optimiz\$5 with tun\$4 and<br>("reception quality") and GPS | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 12:50 |
| S11 | 1  | optimiz\$5 with tun\$4 same<br>("reception state") and GPS  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:13 |
| S12 | 1  | optimiz\$5 same tun\$4 same<br>("reception state") and GPS  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:14 |
| S13 | 1  | optimiz\$5 same tun\$4 and<br>("reception state") and GPS   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:14 |

## EAST Search History

|     |    |   |   |    |    |                  |
|-----|----|---|---|----|----|------------------|
| S14 | 10 | optimiz\$5 same tun\$4 and ("reception quality") and GPS  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:14 |
| S15 | 4  | optimiz\$5 same tun\$4 same ("reception quality") and GPS   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:15 |
| S16 | 6  | optimiz\$5 with tun\$4 and ("reception quality") and GPS and (profile\$2 or look\$4 or histor\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:54 |
| S17 | 2  | S15 and (@ad<"20040331" @rlad<"20040331")   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:54 |
| S18 | 3  | optimiz\$5 and tun\$4 with ("reception quality") and GPS and (profile\$2 or look\$4 or histor\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:57 |
| S19 | 20 | optimiz\$5 and tun\$4 and ("reception quality") and GPS and (profile\$2 or look\$4 or histor\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:58 |
| S20 | 13 | S19 and (@ad<"20040331" @rlad<"20040331")   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 13:58 |
| S21 | 6  | optimiz\$5 and ("reception quality") and GPS and (profile\$2 or look\$4 or histor\$4) with tun\$5 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:10 |

## EAST Search History

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|-----|----|--|---|----|----|------------------|
| S22 | 6  | optimiz\$5 and ("reception quality") and GPS and tun\$5 with (profile\$2 or look\$4 or histor\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:13 |
| S23 | 9  | optimiz\$5 and ("reception quality") and GPS and tun\$5 same (profile\$2 or look\$4 or histor\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:13 |
| S24 | 1  | ("reception quality") with (locat\$4 or area\$2 or cell\$4) with tun\$5 with (profile\$2 or look\$4 or histor\$4)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:23 |
| S25 | 1  | ("reception quality") same (locat\$4 or area\$2 or cell\$4) same tun\$5 with (profile\$2 or look\$4 or histor\$4)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:24 |
| S26 | 4  | ("reception quality") and (locat\$4 or area\$2 or cell\$4) same tun\$5 with (profile\$2 or look\$4 or histor\$4)                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:24 |
| S27 | 11 | ("reception quality") and (locat\$4 or area\$2 or cell\$4) and tun\$5 with (profile\$2 or look\$4 or histor\$4)                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:26 |
| S28 | 49 | ("reception quality") and (locat\$4 or position\$4 or area\$2 or cell\$4) and tun\$5 with (profile\$2 or look\$4 or histor\$4 or condition\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:28 |
| S29 | 38 | S28 not S27  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/27 14:28 |

## EAST Search History

|     |     |   |  |    |    |                  |
|-----|-----|---|--|----|----|------------------|
| S30 | 28  | S29 and (@ad<"20040331"<br>@rlad<"20040331")  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON | 2008/02/27 14:29 |
| S31 | 4   | "6628930"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON | 2008/02/27 15:09 |
| S32 | 6   | ("5345602"   "5430890"   "5590156"<br>  "6141536"   "6151488"  <br>"6272191").PN. OR ("6628930").<br>URPN.  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/27 15:10 |
| S33 | 49  | ("reception quality") and (locat\$4 or<br>position\$4 or area\$2 or cell\$4) and<br>tun\$5 with (profile\$2 or look\$4 or<br>histor\$4 or condition\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON | 2008/02/27 20:42 |
| S34 | 13  | ("4387469"   "4430753").PN. OR<br>("4476582").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/27 21:11 |
| S35 | 15  | "4476582"   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/28 08:30 |
| S36 | 1   | S35 and GPS\$2  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/28 08:30 |
| S37 | 0   | S36 and rate\$2   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/28 08:44 |
| S38 | 5   | S35 and rate\$2   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/28 08:44 |
| S39 | 0   | GPS with ("reception quality") with<br>(deteriot\$4 or los\$4 or distan\$4 or<br>error\$2) and rate\$2  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2008/02/28 09:01 |
| S40 | 138 | GPS and ("reception quality") and<br>(deteriot\$4 or los\$4 or distan\$4 or<br>error\$2) and rate\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 09:01 |

## EAST Search History

|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| S41 | 89 | S40 and (@ad<"20040331"<br>@rlad<"20040331")   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 09:02 |
| S42 | 10 | S41 and tun\$5 with (profile\$2 or<br>look\$4 or histor\$4 or condition\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 09:02 |
| S43 | 12 | S41 and tun\$5 same (profile\$2 or<br>look\$4 or histor\$4 or condition\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 09:17 |
| S44 | 34 | S41 and tun\$5 and (profile\$2 or<br>look\$4 or histor\$4 or condition\$4)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 09:21 |
| S45 | 22 | S44 not S43  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 09:21 |
| S46 | 26 | ("20030013469"   "5532702"  <br>"5535430"   "5805113"   "5977928"<br>  "6097974"   "6104745"  <br>"6208844"   "6208861"   "6218984"<br>  "6275475"   "6298243"  <br>"6317608"   "6323806"   "6505054"<br>  "6510313"   "6542722"  <br>"6546258"   "6553210"   "6600931"<br>  "6658237"   "6667723"  <br>"6694129"   "6694150"   "6865376"<br>  "6973307").PN. OR ("7181171").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2008/02/28 10:50 |
| S47 | 20 | S46 and GPS\$2   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2008/02/28 10:59 |
| S48 | 11 | S47 and tun\$4   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2008/02/28 10:59 |

## EAST Search History

|     |     |  |   |    |    |                  |
|-----|-----|--|---|----|----|------------------|
| S49 | 5   | S48 and (profile\$2 or look\$4 or histor\$4 or condition\$4)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:00 |
| S50 | 497 | tun\$4 with GPS with (position\$4 or locat\$4) and (profile\$2 or look\$4 or histor\$4 or condition\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:04 |
| S51 | 367 | S50 and (@ad<"20040331"<br>@rlad<"20040331")   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:05 |
| S52 | 24  | tun\$4 with GPS with (position\$4 or locat\$4) with (profile\$2 or look\$4 or histor\$4 or condition\$4) and (@ad<"20040331"<br>@rlad<"20040331")              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:05 |
| S53 | 89  | tun\$4 with GPS with (position\$4 or locat\$4) with (profile\$2 or look\$4 or histor\$4 or condition\$4 or distan\$4) and (@ad<"20040331"<br>@rlad<"20040331") | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:06 |
| S56 | 13  | S52 and error\$5   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:09 |
| S57 | 60  | S53 and error\$5   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:09 |
| S58 | 1   | S53 and ("bit error rate" or BER)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:11 |

## EAST Search History

|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| S59 | 0  | S52 and ("bit error rate" or BER)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:11 |
| S60 | 0  | S51 and ("reception quality") and ("bit error rate" or BER)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:12 |
| S61 | 0  | S51 and (recept\$4 same qualit\$3) and ("bit error rate" or BER)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:13 |
| S62 | 1  | S51 and qualit\$3 and ("bit error rate" or BER)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 11:13 |
| S63 | 2  | ("reception quality") and (locat\$4 or position\$4 or area\$2 or cell\$4) and ("digital radio") and tun\$5 with (profile\$2 or look\$4 or histor\$4 or condition\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 12:53 |
| S64 | 10 | ("reception quality") and (locat\$4 or position\$4 or area\$2 or cell\$4) and ("digital radio") and tun\$5 same (profile\$2 or look\$4 or histor\$4 or condition\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 12:54 |
| S65 | 36 | ("reception quality") and (locat\$4 or position\$4 or area\$2 or cell\$4) and ("digital radio") and tun\$5 and (profile\$2 or look\$4 or histor\$4 or condition\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 12:54 |
| S66 | 7  | S64 and (@ad<"20040331" @rlad<"20040331")  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 12:56 |



## EAST Search History

|     |    |   |   |    |    |                  |
|-----|----|---|---|----|----|------------------|
| S67 | 22 | S65 and (@ad<"20040331"<br>@rlad<"20040331")  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 12:56 |
| S68 | 7  | S66 and digital   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 13:02 |
| S69 | 22 | S67 and digital   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 13:02 |
| S70 | 15 | "4476582"   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2008/02/28 13:03 |
| S71 | 12 | S70 and digital   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 13:03 |
| S72 | 49 | ("reception quality") and (locat\$4 or<br>position\$4 or area\$2 or cell\$4) and<br>tun\$5 with (profile\$2 or look\$4 or<br>histor\$4 or condition\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 13:05 |
| S73 | 42 | S72 and digital   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2008/02/28 13:05 |